



## Gillfab™ 4322 Panel

March 1997

### Description

---

Gillfab 4322 is a low smoke sandwich panel with facings of phenolic resin reinforced with woven glass cloth bonded to a Nomex® honeycomb core.

### Applications

---

Flooring panel for containerized cargo loading compartment for Airbus Industrie A320 and A321 aircraft.

### Features

---

- All phenolic resin - low smoke and toxic emissions in a fire.
- High impact, corrosion resistant facings.
- Light weight.
- Service temperature: to 180°F.
- Good burn through resistance.

### Specifications

---

- Airbus Industrie Technical Specification No. 5360 M1B 000100.
- ATS 1000.001 - Smoke density, toxicity, flammability, heat release, and burn through

### Construction

---

Adhesive:	Modified epoxy.
Core:	Aramid honeycomb.
Facings:	Phenolic resin, glass fiber reinforced plastic.

### Availability

---

Thickness:	.374"
Length and Width:	Per customer specification, 60"w x 96"l maximum
Facing thickness:	Top - .024", Bottom - .022"
Core:	6.0 pcf density, 3/16" cell size



### Standard Tolerances

---

Thickness:	$\pm.020$ "
Length and Width:	-0, +0.5; core: 60" x 96" (one splice core maximum)
Warpage:	$<.004 L^2/T$ where L = length (ft.) and T = thickness (in.)

### Alternative Gill Products

---

Product Number	Difference
Gillfab 4323	Thicker facings and core. Used as flooring in bulk cargo compartment in the A320 and A321 aircraft.



## Properties of Gillfab 4322

Based on a panel with 0.022"/0.024" thick facings and  
0.330" thick core at 6.0 pcf nominal density.

Property	Test Method	Unit	Value
Weight	ASTM C29	lb/sq ft (kg/sq m)	0.697 (3.40)
Thickness	ASTM C366	inch (mm)	0.374 (9.5)
Distributed Surface Load Permanent Set	Airbus Industrie 5360	lb (N)	>1,414 (>6,290)
Ultimate Load	M1B000100	lb (N)	3,800 (16,987)
Concentrated Load, Permanent Deformation	Airbus Industrie 5360 M1B000100	lb (N)	>200 (890)
Impact Strength	Airbus Industrie 5360 M1B000100	ft-lb (N-m)	7 (9.5)
Insert Pull Out Before Aging	Airbus Industrie 5360	lb (N)	1,700 (7,562)
After Aging	M1B000100	lb (N)	1,700 (7,562)
Flammability - vertical Note 1 Extinguishing Time	Airbus Industrie ATS 1000.001	second	<1
Burn Length		inch (mm)	1.2 (30)
Flaming Drops Time		second	0
Flammability - 45 Degree Note 1 Extinguishing Time	Airbus Industrie ATS 1000.001	second	3
Afterglow		second	0
Penetration		---	None
Smoke Density Note 2 Non-Flaming - 4 minute	Airbus Industrie ATS 1000.001	D <sub>s</sub>	3
Flaming - 4 minute		D <sub>s</sub>	60
OSU Heat Release Note 3 Peak HHR	Airbus Industrie ATS 1000.001	kw/m <sup>2</sup>	45
Total HHR		kw-in/m <sup>2</sup>	45
Oil Burner Note 4	Airbus Industrie ATS 1000.001	---	Pass
Note 1 - Equivalent to FAR 25, Appendix F, Part I			
Note 2 - Equivalent to FAR 25, Appendix F, Part V			
Note 3 - Equivalent to FAR 25, Appendix F, Part IV			
Note 4 - Equivalent to FAR 25, Appendix F, Part III; test performed by SGS/U.S. Testing Company, Inc.			

M.C. Gill Corporation gives no warranties, expressed, implied or statutory, or otherwise, as to the description, quality, fitness, capacity, or any other matter, of the properties described. The data given represents minimum values to be expected. Through additional testing of each lot it is possible to verify that the product exceeds the tabulated values. It is recommended, however, that prospective users evaluate the materials to determine their suitability for the users' specific requirements. Values are given on the condition that the user assumes all risk and that responsibility for any loss or damage caused by or resulting from the use of such information is disclaimed by M.C. Gill Corporation.

M.C. Gill Corp.  
4056 Easy Street  
El Monte, CA 91731-1087 USA  
626-443-4022 info@mcgillcorp.com

M.C. Gill Europe Ltd. - Insoleq  
23 Enterprise Road, Balloo Industrial Estate South  
Bangor Co-Down BT19 7TA, Northern Ireland  
+44 (0) 2891 470073 sales@mcgillcorp.com

[www.mcgillcorp.com](http://www.mcgillcorp.com)

© M.C. Gill Corporation. All rights reserved.

